At UTAS data is entered and stored once in an Oracle database through a web-based interface. In order to meet our quality and reporting obligations the data is transformed (not transferred or moved to a different data store) through a set of functions that define the specific output requirements. Where data needs to be modified it is changed at the source and not in a down-stream data store (because there are none). This approach improves efficiency and data quality and allows for agility of reporting.

The advantages of the functional transformation approach include:

- Single point of collection (anywhere!)
- Parallel processing and simultaneous access
- Improved safety – functional transformations limit side effects
- Improved quality – data is stored once and is easy to maintain
- Higher efficiency – just define a function to report or transform
- Extremely agile – more easily meet changes to reporting requirements

**Data Definitions**

- Define publications_type as "the set of publication metadata and attached documents"
- Define publication_set as "the year of publication collection"
- Define herdc_dataset = publication_set (if quality checked, if Academic Coordinator confirms category, if Head of School certifies collection, if reclassification required)
- Define herdc_report = herdc_points (herdc_set(publication_set, collection year))

**References**


**meCite**

The mobile interface to eCite (the UTAS institutional research output repository) was built in just a few days. This was achieved since the publication data set is readily available and easily accessible requiring just a few functional transformations. Have a look using the QR code facility of your mobile device!